



**SAFETY DATA SHEET**  
ALUMINIUM CHLORIDE ANHYDROUS 99%

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Compilation date: 10/01/2019

Revision No: 1

**Section 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

**Product name:** ALUMINIUM CHLORIDE ANHYDROUS 99%

**CAS number:** 7446-70-0

**EINECS number:** 231-208-1

**Product code:** GPC9294

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Use of substance / mixture:** PC21: Laboratory chemicals.

**1.3. Details of the supplier of the safety data sheet**

Select School Supplies  
The Old Granary  
Berghill House  
Oswestry  
SY11 4PD  
01691 770366  
sales@selectschoolsupplies.co.uk

**1.4. Emergency telephone number**

**Emergency tel:** 01691 770366

**Section 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification under CLP:** Skin Corr. 1B: H314

**Classification under CHIP:** C: R34

**Most important adverse effects:** Causes severe skin burns and eye damage.

**2.2. Label elements**

**Label elements under CLP:**

**Hazard statements:** H314: Causes severe skin burns and eye damage.

**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion



**Precautionary statements:** P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

[cont...]

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P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing.

Rinse skin with water/shower.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310: Immediately call a POISON CENTER or doctor.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## 2.3. Other hazards

**Other hazards:** Reacts violently with water. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** ALUMINIUM CHLORIDE ANHYDROUS 99%

**CAS number:** 7446-70-0

**EINECS number:** 231-208-1

**Contains:** Formula :  $AlCl_3$

Molecular weight : 133.34 g/mol

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** No data available.

**Eye contact:** Severe eye irritation.

**Ingestion:** No data available.

**Inhalation:** No data available.

**Delayed / immediate effects:** No data available.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** No data available.

[cont...]

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**Section 5: Fire-fighting measures**

**5.1. Extinguishing media**

**Extinguishing media:** Dry chemical powder. Carbon dioxide. Dry Sand Do NOT use water jet.

**5.2. Special hazards arising from the substance or mixture**

**Exposure hazards:** Not applicable.

**5.3. Advice for fire-fighters**

**Advice for fire-fighters:** Wear self-contained breathing apparatus.

**Section 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

**6.2. Environmental precautions**

**Environmental precautions:** Do not discharge into drains or rivers.

**6.3. Methods and material for containment and cleaning up**

**Clean-up procedures:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Do not flush with water.

**6.4. Reference to other sections**

**Reference to other sections:** Refer to section 13 of SDS.

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling requirements:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Keep container tightly closed. Store in cool, well ventilated area. Never allow product to get in contact with water during storage. Store under inert gas. Moisture sensitive. Vent periodically. Handle and open container with care. Reacts violently with water.

**Suitable packaging:** Not applicable.

**7.3. Specific end use(s)**

**Specific end use(s):** No special requirement.

**Section 8: Exposure controls/personal protection**

[cont...]

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**8.1. Control parameters**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK		-	-	-

**8.1. DNEL/PNEC Values**

**DNEL / PNEC** No data available.

**8.2. Exposure controls**

**Engineering measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Respiratory protection:** Particle filter class P3S (EN143). If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:** Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

**Eye protection:** Face-shield. Safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Environmental:** Do not let product enter drains. Prevent from entering in public sewers or the immediate environment.

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

**State:** Powder

**Colour:** Pale yellow

**Solubility in water:** Decomposes in contact with water.

**Boiling point/range°C:** 187.7 °C at 1,003hPa

**Melting point/range°C:** 190 °C - lit

**Vapour pressure:** < 1.33 hPa at 20 °C

**Relative density:** 2.4400 g/cm<sup>3</sup>

**pH:** 2.4 at 100 g/l

[cont...]

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**9.2. Other information**

**Other information:** Not applicable.

**Section 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity:** No data available.

**10.2. Chemical stability**

**Chemical stability:** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

**Hazardous reactions:** Reacts violently with water.

**10.4. Conditions to avoid**

**Conditions to avoid:** Exposure to moisture.

**10.5. Incompatible materials**

**Materials to avoid:** Strong oxidising agents. Alcohols. Water. Mixtures of nitrobenzene and aluminum chloride are thermally unstable and may lead to explosive decomposition due to a multi-step decomposition reaction occurring above 90 degrees C, which self-accelerates with high exothermicity producing azo-azoxypolymers

**10.6. Hazardous decomposition products**

**Haz. decomp. products:** In combustion emits toxic fumes of hydrogen chloride / phosgene. In combustion emits toxic fumes of aluminium oxide.

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Relevant hazards for substance:**

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data

**Symptoms / routes of exposure**

**Skin contact:** No data available.

**Eye contact:** Severe eye irritation.

**Ingestion:** No data available.

**Inhalation:** No data available.

**Delayed / immediate effects:** No data available.

**Other information:** Not applicable.

[cont...]

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**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity values:**

Species	Test	Value	Units
FISH	96H LC50	36.6	mg/l
DAPHNIA	48H EC50	27.3	mg/l
ALGAE	48H EC50	0.57	mg/l

**12.2. Persistence and degradability**

**Persistence and degradability:** Not applicable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** No data available.

**12.4. Mobility in soil**

**Mobility:** No data available.

**12.5. Results of PBT and vPvB assessment**

**PBT identification:** This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects**

**Other adverse effects:** Harmful to aquatic organisms.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

**Recovery operations:** Not applicable.

**Disposal of packaging:** Dispose of as unused product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information**

**14.1. UN number**

**UN number:** UN1726

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**14.2. UN proper shipping name**

**Shipping name:** ALUMINIUM CHLORIDE, ANHYDROUS

**14.3. Transport hazard class(es)**

**Transport class:** 8

**14.4. Packing group**

**Packing group:** II

**14.5. Environmental hazards**

**Environmentally hazardous:** No

**Marine pollutant:** No

**14.6. Special precautions for user**

**Special precautions:** No special precautions.

**Tunnel code:** E

**Transport category:** 2

**Section 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Specific regulations:** This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** H314: Causes severe skin burns and eye damage.

R34: Causes burns.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.